CONFIDENTIAL CONFIDENTIAL CLASSIFICATION 50X1-HUM REPORT CENTRAL INTELLIGENCE AGENCY INFORMATION FROM FOREIGN DOCUMENTS OR RADIO BETADCASTS CD NO. DATE OF COUNTRY USSR INFORMATION 1950 Scientific - Physics, X-rays, neutrons **SUBJECT** DATE DIST. // Jun 1951 HOW 50X1-HUM **PUBLISHED** Book. WHERE NO. OF PAGES Moscow/Leningrad **PUBLISHED** DATE **PUBLISHED** 1950 SUPPLEMENT TO REPORT NO. Russian LANGUAGE THI' IS UNEVALUATED INFORMATION 50X1-HUM Dozimetriya Ioniziruyushchikh Izlucheniy, Gostekhizdat SOURCE TABLE OF CONTENTS OF "DOSIMETRY OF IONIZING RADIATIONS: RADIOMETRY AND ROENTGENOMETRY" BY K. K. AGLINTSEV According to the preface, this is the first Soviet book devoted entirely to the desimetry of radiation. The author explains physical laws fundamental to dosimetry; outlines basic experimental methods; defines units; and describes special measuring equipment and basic applications of dosimetry. The book is intended for physicists, engineers, and science students concerned with this subject and will also be of interest to biologists and physicians. TABLE OF CONTENTS Page Preface Introduction I. Passage of Charged Particles Through Matter II. Passage of Radiation Through Matter III. Passage of Neutrons Through Matter IV. Measurements of Low Currents. Electrometers Measurements of Low Currents. Electrometric Electronic Tubes VI. Ionization Chambers 174 VII. Counter Tubes 207 VIII. Units of Radiometry and Roentgenometry IX. Absolute Measurements in Roentgens 231 X. Various Types of Operating Roentgenometers XI. Measurements of Ionization by Alpha and Beta Radiators 257 XII. Dosimetry of Neutrons XIII. Analysis of X-ray Radiation by Absorption Method XIV. Dosimetry During Operation of X-ray Equipment 273 308 Measurement of Instantaneous Values of Radiation XV . Power by Ionization Method Dosimetry of Radioactive Substances Determination of Half-Lives DO NOT CIRCULATE CONFIDENTIAL -1-

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